MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2022/23

EEE7226 – QUALITY SYSTEM MANAGEMENT

(All Sections / Groups)

10 JULY 2023
2.00 p.m -5.00 p.m
(3 Hours)

INSTRUCTION TO STUDENT

1. This question paper consists of 5 pages only (including this page).
2. Attempt ALL **FOUR** questions. All questions carry equal marks (25 marks) and the distribution of the marks for each question is given.
3. Please print all your answers in the Answer Booklet provided.

Question 1

(a) Define the term "Quality" in business organization.

[5 marks]

(b) Draw a framework of Quality Perspective which involve producer's perspective and consumer's perspective.

[5 marks]

(c) Provide SEVEN(7) deadly diseases of management in Quality System Management.

[7 marks]

(d) By using problem-solving method, provide the details of University business organization.

[8 marks]

Continued...

Question 2

(a) Define the term "Statistical Process Control (SPC)" in business organization.

[8 marks]

(b) Quality Assurance (QA) is required University business organization. Critically describe this statement.

[5 marks]

(c) In Six Sigma Defect Metric, assuming there are 10 defects among 100 invoices, and there are 10 opportunities for errors for every invoice, determine the Defects Per Million Opportunity (DPMO).

[5 marks]

(d) In project management, assume that a car has gone out of control during a snowstorm and strikes a tree. Construct a cause-and-effect diagram that identifies and outlines the possible causes of the accident.

[7 marks]

Continued...

Question 3

(a) In university business organization, describe the important of check sheet as a basic tools of quality control.

[6 marks]

(b) Provide reasons why benchmarking process is important in quality tools.

[6 marks]

(c) "Quality improvement places a great deal of responsibility on all people involved in one organization. However, to be able to identify and correct quality problems, all involved need proper training". Justify this statement.

[6 marks]

(d) In one electronic component project, assume that the time to failure in hours is subject to an accelerated life test is shown in Table 3. To accelerate the failure test, the units were tested at an elevated temperature (read down, then across).

127	124	121	118
125	123	136	131
131	120	140	125
124	119	137	133
129	128	125	141
121	133	124	125
142	137	128	140
151	124	129	131
160	142	130	129
125	123	122	126

Calculate the sample average and standard deviation.

[7 marks]

Continued...

Question 4

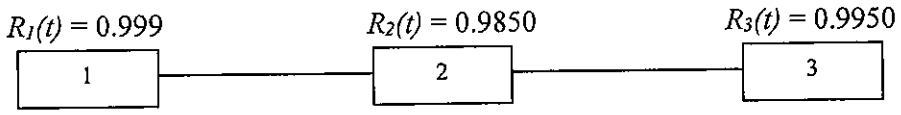
(a) In total quality management, provide the FIVE(5) basic elements to ensure a successful implementation initiative in an organisation.

[5 marks]

(b) Provide FIVE(5) reasons for adopting ISO 9000.

[5 marks]

(c) Assume a series system is made up of three components, as shown in figure below. The reliabilities of each component at some pre-specified time t are shown in the figure. All components operate independently. Determine the system reliability.



[5 marks]

(d) DMAIC (Define, Measure, Analyze, Improve and Control) is used for projects which aimed at improving an existing business process. Design a DMAIC in University business organization which involve five phases for continued improvement process.

[10 marks]

End of Paper